

A CCD linear sensor includes a monochrome sensor and a color sensor, which have different transfer speeds and which are mounted on the same chip. In the CCD linear sensor, while one read-out operation is performed by the color sensor, two read-out operations are performed by the monochrome sensor. During the second read-out period of the monochrome sensor, by stopping the generation of two-phase transfer pulses to be supplied to the transfer registers of the color sensors during a predetermined period of time before and after the second read-out pulse occurs, the transfer operation of the transfer registers of the color sensors is stopped.